

Final Report (October 2005)

**AN ASSESSMENT OF THE OVERALL IMPLEMENTATION AND  
ADJUSTMENT COSTS FOR THE ACP COUNTRIES OF  
ECONOMIC PARTNERSHIP AGREEMENTS WITH THE EU**

Report to the Commonwealth Secretariat

by

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## 0 Executive Summary

- This study distinguishes between the effects (trade, revenue, production, employment and welfare effects) of Economic Partnership Agreements (EPAs) and the adjustment costs of EPAs.
- Rather than seek to quantify the costs that would fall on individual economic agents (workers, firms etc), the study seeks to identify the type and scale of adjustment assistance measures that need to be implemented in the transition to an EPA in order to avoid or reduce the adjustment costs that would fall on ACP countries in the absence of this support. By identifying the types of adjustment support programmes required to increase the capacity to adapt to a post-EPA environment, the study concentrates on how to make EPAs work and bring development benefits for the ACP countries.
- The report identifies four broad category of adjustment assistance support costs, namely:-
  - fiscal adjustment costs
  - trade facilitation and export development costs
  - production and employment adjustment costs
  - skill development and productivity enhancement costs
- Fiscal adjustment costs arise as a result of the need to replace any tariff revenue losses associated with the removal of tariffs on imports from the EU post-EPA. ACP countries will need to either revise or reform the structure of taxation from non-trade tax sources in order to increase revenue from these alternative sources.
- Trade facilitation and export diversification support is required in order to reap the benefits of re-allocating resources (capital, labour, skills and land) away from import-competing sectors towards new export activities (under the stimulus of greater competition on the home market from EU exporters). Actual and potential exporters in ACP countries will need support with developing export products and gaining knowledge about export market opportunities.

- Production and employment adjustment programmes will be required because the reallocation of displaced resources from current (pre-EPA) activities to export sectors will not be immediate and smooth. ACP countries will need assistance with the adjustment experienced by workers (compensation for unemployment, support for relocation and retraining) and by firms (closure, production line restructuring etc).
- Skills development and productivity enhancement support programmes will reduce the costs of adjustment (contraction of import-substitution activities and expansion of export sectors) and increase the scope for dynamic benefits from export development. Increasing competitiveness and productivity levels in preparation for the full implementation of EPAs requires the enhancement of workers' skills, the improvement of firm's organisation and management structures and the development of supportive economic policies and infrastructures.
- The methodology used to approximate these adjustment assistance costs:
  - categories countries by size and potential degree of adjustment in each of the above categories
  - allocates cost estimates to each category of ACP country based on a mixture of information from comparable World Bank projects and interpolation
  - aggregates the costs across countries and types of adjustment cost.
- The overall cost of adjustment assistance for the ACP is estimated (at 2005 equivalent prices) to be €9 billion, with a breakdown of:-
  - €3.0 billion for fiscal adjustment support
  - €2.3 billion for trade facilitation/export development support
  - €1.5 billion for production and employment adjustment assistance
  - €2.3 billion for skills and productivity enhancement support
- The fiscal adjustment costs are predominantly related to legislative and administrative reforms in the public sector (tax administration reforms and development), while the other categories would involve a mixture of disbursement to the public and private sectors in the ACP.

- The study reports on the breakdown of the adjustment assistance support costs for each of the regional negotiating grouping (see table 9.3).

## 1 Introduction

Non-reciprocated, preferential access to the European Union (EU) for African, Caribbean and Pacific (ACP) countries under the Lomé provisions was challenged under the rules of the World Trade Organisation (WTO). Preferences granted to specific developing countries can only be maintained, in a GATT-consistent manner, on a basis of reciprocity. In the Cotonou Agreement, the successor to Lomé, the EU proposed negotiating a series of Economic Partnership Agreements (EPAs), under which the EU and regional groupings of ACP countries offer reciprocal trade preferences to each other. In order to continue to gain preferential access to the EU, each ACP regional trading group would have to give the EU preferential access to their own regional market. The question facing ACP countries is whether the benefits of an EPA outweigh the costs of granting preferential access to the EU and how the issue of adjustment costs should be addressed in negotiations. The certain benefits are continued preferential access for ACP exports<sup>1</sup> and there are possible benefits also from discriminatory liberalising imports, while the costs arise from the adjustment to liberalisation of their domestic markets to imports from the EU.

A partnership agreement between EU and 71 ACP partners states was concluded in February 2000 (the Cotonou Agreement), covering various dimensions including economic relations, aid and trade cooperation. On the latter, the general principle of a WTO-compatible EPA arrangement for the future was agreed. The EU applied to the WTO for an eight-year waiver to provide a transition period for any new arrangement and this was granted at Doha. Over this period the EU and ACP states planned to negotiate and try to agree a new WTO compliant trade agreement, which would then be implemented over a transitional period starting by 2008 at the latest. Such an arrangement could allow asymmetry, in other words more gradual liberalisation by ACP countries (the EU proposed a further 10-15 year transition period before the EU could export duty free to ACP countries in an EPA).

Although most ACP countries have indicated they would like to negotiate with the EU as a block (some are inclined to negotiate alone), the EU has been adamant that negotiations should be with regional groupings of ACP countries. In fact, when the proposal was first

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<sup>1</sup> Though LDC ACP countries would gain preferential access until the EU's 'Everything But Arms' (EBA) initiative.

discussed in the latter half of the 1990s, the term Regional Economic Partnership Agreement was used. Negotiations between the EU and various ACP regional groupings were supposed to start in late 2003, but stalled and were delayed until April 2004.

The terms of reference for this study require that:

- (i) The nature of the implementation and adjustment costs are identified and approximated for individual ACP countries and for the ACP grouping of countries as a whole.
- (ii) The above costs are de-composed into their components, that is between negotiating, legislative, fiscal and sectoral adjustment costs.
- (iii) Given (i) and (ii), a negotiating target is established for the European Development Fund for ACP adjustment to EPAs, including guidance on the mechanisms of disbursement of adjustment assistance over time, across countries (according to the degree of adjustment involved) and between the public and private sectors of the adjusting ACP countries.

## **2. Nature and Costs of EPAs: An Overview**

The European Union's long term aim is to establish free trade areas with each of the three ACP regions as a replacement for the Lomé agreements. The GATT Article XXIV does allow for the negotiation of customs unions or free trade areas that offer preferential treatment to member countries, subject to certain conditions. The most important of these is that the free trade area should 'eliminate duties and other restrictive regulations of commerce ... on substantially all the trade between constituent territories in products originating in such territories' (GATT Article XXIV, Paragraph 8(b)). There appears to be no agreed definition of what 'substantially all the trade' means in practice. It does appear that both qualitative and quantitative aspects are important. On the former, exclusion of whole sectors (e.g. agriculture) is likely to be prohibited. On the latter, full liberalisation of 80-90% of trade between the partners is likely to be required, but even this raises a number of complex questions (e.g. whether it is the volume or value of trade and whether before or after liberalisation).

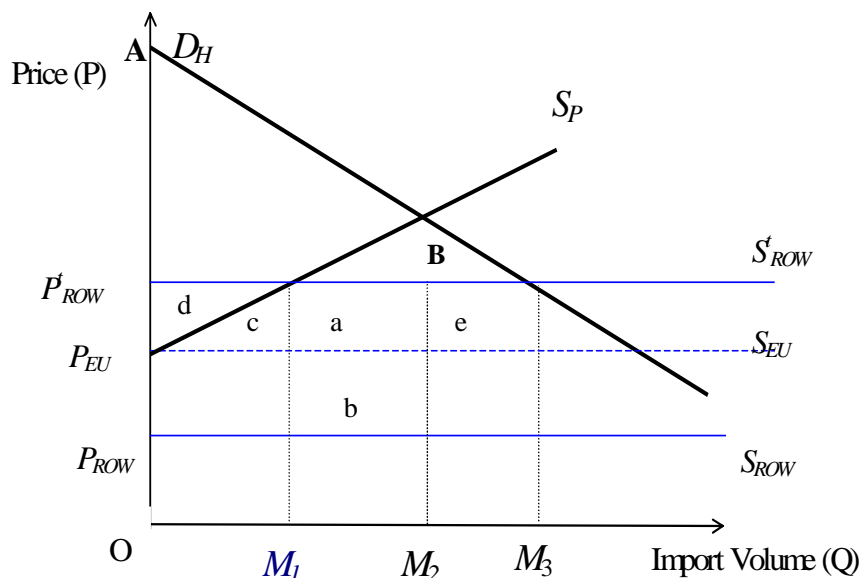
Any interim arrangements leading up to the full establishment of the free trade areas 'shall include a plan and schedule for the formation of such a customs union or such a free trade area within a reasonable length of time', (GATT Article XXIV, paragraph 5(c)). In this context, 'a reasonable length of time' is likely to mean not more than ten years. This would mean that if an EPA is to begin in 2008, full liberalisation of 'substantially all the trade' would need to be achieved by 2018. Within this time period, though, there do not appear to be any symmetry requirements; the ACP partner countries can liberalise much more slowly than the EU, subject to them meeting the 'reasonable length of time' criterion. Given the present non-reciprocity of trade relations between the EU and ACP countries, some asymmetry is likely to be desirable (and has been accepted in principle by the EU).

### *Conceptual framework*

The key effects of introducing reciprocity by an ACP (home) country member (H) can be illustrated with figure 1 (see also McKay, Milner and Morrissey, 2005). The partner country's (P) supply curve is upward sloping and the supply for two (initial) outside suppliers (here the EU and the rest of the world - ROW) is assumed to be infinitely elastic. The analysis is partial equilibrium in nature, markets are assumed to be perfectly

competitive, and there is perfect substitutability between imports from alternative sources and imported and domestically produced import substitutes.

**Figure 1: Effect of an EU-ACP EPA**



Assume that H and P have already formed a PTA (preferential trading area), and as small developing countries can be viewed jointly as being small relative to the EU and ROW who supply at constant cost (prices  $P_{EU}$  and  $P_{ROW}$  respectively). In the case of Figure 1 we assume for expositional convenience that  $P_{EU} > P_{ROW}$ , therefore subsequent discriminatory trade policies by the PTA towards the outside countries can have both trade creating and diverting effects. The line  $D_H$  represents the home country's demand for imports,  $S_P$  the partner's supply of exports, and  $S_{EU}$  and  $S_{ROW}$  are the respective export supply functions for the two outside country groupings. We start with a PTA and a non-discriminatory (*ad valorem*) tariff ( $t$ ) on extra-regional imports (where  $P_{ROW}^t = P_{ROW}(1+t)$  but  $P_{EU}^t$  is not shown in the case of the higher cost EU supplier). The home country imports  $OM_2$  in total, with  $OM_1$  coming from the partner country and  $M_1M_2$  from the rest of the world (ROW). By ruling out domestic production capability we can define welfare ( $W$ ) by reference to consumer surplus with respect to the import demand function,  $D_H$ . Thus  $W_{FTA}$  for the home country is given by the triangle  $ABP_{ROW}^t$  plus the tariff revenue on extra-regional imports (area  $a + b$ ).

Now assume that the PTA introduces a discriminatory tariff policy towards extra-regional countries, and as a result of an EPA with the EU continues to impose tariff  $t$  on imports from ROW but allows imports from the EU in duty free. The relevant supply price is now  $P_{EU}$ , with the total quantity of imports expanding from  $OM_2$  to  $OM_3$  and imports coming now wholly from the EU. There are strictly three components of this trade-effect of the EPA; a consumption expansion effect  $M_2M_3$ , a ‘trade diversion’ effect  $M_1M_2$ , and a ‘trade creation’ effect  $OM_1$ . The last two of these effects need more careful explanation, however.

In the case of standard PTA analysis trade diversion usually relates to diverting trade from more efficient extra-regional suppliers to less efficient intra-regional suppliers. The EPA, however, diverts between extra-regional suppliers;  $M_1M_2$  is imported from the less efficient EU rather than the ROW. The resource cost of this is represented by the area  $b$ , with total tariff revenue lost by the home country government being area  $(a + b)^2$ . Similarly, in terms of standard PTA analysis, trade creation usually describes the displacement of less efficient home production by globally efficient extra-regional production. In this case, however, the EPA involves the replacement of intra-regional imports by more (but here not globally) efficient extra-regional imports from the EU.

The global resource-saving on this ‘trade-creation’ (or trade source substitution) effect is shown by area  $c$  in Figure 1. This and the loss in producer surplus for partner country exporters (area  $d$ ) allow consumer surplus on this component of the trade effect of the EPA to increase by area  $(c + d)$ . Thus, the welfare implications for the home country of shifting from the PTA to the EPA are ambiguous, the consumption and trade-creation effects increasing welfare and the trade-diverting effect reducing welfare i.e.  $\Delta W = (c+d+e) - b$ . Clearly the more efficient is the EU the smaller the costs of trade-diversion and the greater the probability of a welfare-improving EPA. In the extreme as  $S_{EU} \rightarrow S_{ROW}$  then the EPA tends toward the free trade outcome.

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<sup>2</sup> The revenue is re-distributed from the government to domestic consumers, and not ‘lost’ in that sense by the country.

### *Adjustment issues*

The net welfare benefits or costs on the import side of introducing reciprocity need to be added to the benefits of continued preferential access for ACP exports to the EU to evaluate the overall long run implications of EPAs for ACP countries. But this is still not a complete evaluation, since the issue of short-to medium term adjustment costs is abstracted from completely in the above analysis. These adjustment costs will differ across ACP countries depending on initial characteristics and policy conditions, but can be considered under the following headings:

(i) *Fiscal adjustment*

In order to replace any tariff revenue losses associated with the EPA an ACP country will need to either revise or reform the structure of taxation from non-trade tax sources in order to increase revenue from these alternative sources.

(ii) *Trade facilitation and export diversification*

If the benefits of re-allocating resources (capital, labour, skills and land) away from import-competing towards new export activities (under the stimulus of greater competition on the home market from EU exporters) are to be reaped, actual and potential exporters in ACP countries will need support with developing export products and gaining knowledge about export market opportunities.

(iii) *Production and employment adjustment*

In figure 1 the displacement of imports from the pre-EPA regional supplier by EU exports will tend to induce falls in production and employment in the partner ACP country. However, where the home country has a production capability (which was for convenience not considered in figure 1) there will be similar displacement to production and employment in the import-competing sector by the growth EU exports to ACP countries. Since the reallocation of displaced resources from current (pre-EPA) activities to export sectors will not be immediate and smooth, then the ACP countries will need assistance with the adjustment experienced by workers (compensation for unemployment, support for relocation and retraining) and by firms (closure, production line restructuring etc).

(iv) *Skills development and productivity enhancement*

The costs of adjustment (contraction of import-substitution activities and expansion of export sectors) will be reduced over time and scope for dynamic benefits from export development will be increased over time by increasing productivity levels in ACP countries. Increasing competitiveness and productivity levels in preparation

for the full implementation of EPAs requires support; through the enhancement of workers' skills, the improvement of firm's organisation and management structures and through the development of supportive economic policies and infrastructures.

(v) *Negotiation and legislative*

In addition to the direct economic and financial costs that will fall on individuals, and on private and public sector organisations in ACP countries, the ACP countries will need to negotiate and implement EPAs. Indeed some negotiation costs have already been incurred, but more negotiations are required. Once the EPAs are agreed, there will be a need to implement the agreements through legislative reform, administrative change, public sector training and adjustment assistance programme support. These will all involve additional public administrative costs in ACP countries.

Note that the focus above is on the process of domestic structural changes associated with the introduction of reciprocal import liberalisation in ACP-EU relations. It does not seek to deal with all aspects of the costs of an EPA. For example, if import liberalisation induces a rapid growth of imports in excess of growth of exports to the EU, then the EPA may induce balance of payments or foreign exchange problems. The issues of macroeconomic policy management in a post-EPA environment are not considered by this study. Similarly the study does not attempt to incorporate any costs imposed on ACP countries resulting from the changes in the special regimes for specific export commodities (e.g. for sugar and bananas).

### **3. Methodology for Assessing Costs**

The present study does not seek to set up a precise methodology to identify and quantify the country-specific adjustment costs that each ACP country might experience as part of the process of implementing an EPA. (A number of studies of this nature exist eg CREDIT (1998, 2004) and Greenaway and Milner (2000).) There are both methodological, resource and data constraints on doing so. Whether formal partial or general equilibrium methods were applied, there would be difficulties in capturing the dynamics of the adjustment and growth processes involved. There would also be enormous data requirements on detailed tariff, trade, production and employment for each country; which for some countries may not be available. This would, if feasible, constitute a very large, long term research project.

Rather than adopt a formal and comprehensive economic modelling approach, a more concise (albeit less formal) methodology to approximate the adjustment costs across the ACP grouping will be adopted. By matching up project costs from the implementation of earlier policy reform programmes (World Bank ones) with the expected implementation of EPA reform programmes, we are able to provide guidance as to the scale of adjustment costs involved. Note that this methodology offers advantages over an economic modelling approach. An economic modelling approach might estimate the changes in economic variables imports, tariff revenue, domestic production and employment. But these economic changes associated with the adjustment to an EPA do not provide a direct indication of the adjustment costs. Those costs relate either to other aspects of the economic adjustment process that are difficult to quantify (ie the length of time that unemployed workers are unemployed and the losses of income experienced by those workers) or that are associated with the implementation of policy reforms within the government administration (e.g. introduction of tax reforms to replace customs duty declines) and the private sector (e.g. the introduction of skill retraining or business organisation enhancement).

The actual costs of adjustment that will be incurred by ACP countries are in any case dependent on the pace and degree of adjustment that they will experience. This will in turn be fashioned on the one hand by what is exactly negotiated on EPA implementation (trade coverage, phasing etc), but also on the other hand by what is put in place to help the ACP countries to become more adaptable and able to adjust to trade liberalisation in a less

costly manner. The focus therefore of the ACP negotiations should be not to try to identify a level of compensation for the uncertain and rather unpredictable costs of adjustment to an EPA. It should, by contrast, be to consider what is required (and what it will cost) to bring adjustment to an EPA in a less costly manner; in other words to identify the costs of making the EPA countries more adjustable and adaptable. Indeed with a compensating - for - adjustment approach the danger is that the funds are used to give offsetting policy interventions (subsidies etc) to sectors subject to greater competition post-EPA which serve to avoid or resist adjustment. By contrast, the ACP countries need support with increasing adaptability and the capacity to adjust so that they can benefit from an EPA and thereby reap its development benefits.

### *Categorising countries*

For each of the types of adjustment costs identified in the previous chapter, namely:

- fiscal adjustment costs
- trade facilitation and export diversification costs
- production and employment adjustment costs
- skills development and productivity enhancement costs

we identify a proxy indicator of potential adjustment required under that category of adjustment cost (e.g. dependence on trade tax revenue for government revenue for fiscal adjustment). This allows us to classify each ACP country according to country size and degree of each type of adjustment.

Table 3.1 below illustrates this classification process. The broad classification into low, medium and high adjustment inevitably introduced a qualitative assessment, but avoids trying to measure the inter-country adjustment needs in a precise, continuous manner. The table further distinguishes between countries on the basis of size, for which we used population size as our proxy. One might have used other size proxies, e.g. GDP, but population is a widely used measure of country size. Again we group rather than measure size on a continuous basis. Although the extent of the adjustment costs will include elements that are fixed or invariant with country size and will be fashioned by other country characteristics, we can accommodate this in part through the non-linearity of the setting of the cost (C) estimates for each cell in the table.

Table 3.1 Illustration of Classification Methodology

Country Size <sup>(1)</sup>	Degree of Adjustment			
	Low Adjustment (1)	Medium Adjustment (2)	High Adjustment (3)	Other <sup>(2)</sup> (4)
Micro (1)	C <sub>11</sub>	C <sub>12</sub>	C <sub>13</sub>	C <sub>12</sub>
Small (2)	C <sub>21</sub>	C <sub>22</sub>	C <sub>23</sub>	C <sub>22</sub>
Medium (3)	C <sub>31</sub>	C <sub>32</sub>	C <sub>33</sub>	C <sub>32</sub>
Large (4)	C <sub>41</sub>	C <sub>42</sub>	C <sub>43</sub>	C <sub>42</sub>
Very Large (5)	C <sub>51</sub>	C <sub>52</sub>	C <sub>53</sub>	C <sub>52</sub>

(1) Population size (micro < 1 million, small 1-5 million, medium 5-15 million, large 15-100 million, and very large > 100 million).

(2) Unavailability of data on proxy adjustment indicator makes it impossible to classify the country.

The methodology therefore is in several stages. ACP countries are allocated to cells for each type of adjustment cost. The costs for each cell are set on the basis of programme costs from World Bank reform programmes (either by exact matching or by interpolation); costs increasing with the degree of adjustment (i.e.  $C_{13} > C_{12} > C_{11}$ ) and with the size of country (i.e.  $C_{51} > C_{41} > C_{31} > C_{21} > C_{11}$ ). (Note that in the case of the other or unclassified we set costs at the medium level on the principle of offsetting errors.)

#### 4. Fiscal Adjustment

The amount of direct fiscal loss for any one ACP country resulting from the EPA-induced lowering of tariffs on imports from the EU will depend on a range of factors. These will include the level of current tariffs on imports from the EU, the amount of imports from the EU prior to the tariff reduction and the amount of imports that are diverted from non-EU sources as a result of the discriminatory liberalisation of tariffs.<sup>3</sup> Given that we want to have a simple criteria for classifying countries, we decide to use the share of trade tax revenue in each country's tax revenue as the indicator of the degree of potential fiscal adjustment cost associated with an EPA. There are good grounds for taking this more general indicator. Firstly, more specific indicators such as the current average tariff on imports from the EU or the share of current imports from the EU may be misleading. The tariff revenue effects may not be well indicated by these specific indicators, since the revenue-maximising tariff rate varies across countries as does the scope for import source-substitution from non-EU sources of supply. Secondly, we need to recognise that it is not the revenue effect itself that captures the cost of fiscal adjustment. The decline in customs revenue is a domestic redistribution from the government to consumers of imported goods. For the governments of some countries any decline in customs revenue can be relatively easily offset by increasing tax collection from other sources (e.g. sales and income taxes). For others the absence or under-development of the tax regime makes this switch of revenue generation more difficult and more costly to resolve. The adjustment costs may be associated with a range of legislative and administrative changes, hiring and retraining costs, or infrastructure developments required in order to extend or develop tax revenue generating capacity in the non-trade tax domain.

##### *Classifying countries according to trade tax dependence*

Using the information set out in Appendix 1 on trade tax dependence (the percentage share of trade taxes in total government revenue) we classify ACP countries using the methodology described in the previous chapter. This classification is summarised in table 4.1, taking <20% trade tax dependence as an indicator of relatively low adjustment cost, 20-40% as medium adjustment cost and >40% as high adjustment cost.

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<sup>3</sup> A number of recent studies recognise the fiscal consequences of trade liberalisation for developing countries (eg IMF, 2005).

Table 4.1 Potential Degree Of Fiscal Adjustment Required

Country Size	LOW ADJUSTMENT		MEDIUM ADJUSTMENT		HIGH ADJUSTMENT		OTHER	
	Country	% Trade tax	Country	% Trade tax	Country	% Trade tax	Country	% Trade tax?
<b>MICRO</b>	São Tomé and Príncipe	19%	Suriname	37%	Seychelles	47%	Bahamas, The	...
	Djibouti	17%			Comoros	42%	Barbados	...
	Equatorial Guinea	15%			Cape Verde	41%	Belize	...
	Guyana	12%					Dominica	...
						Fiji	...	
						Grenada	...	
						Kiribati	...	
						Micronesia, Fed. Sts.	...	
						Palau	...	
						Samoa	...	
						Solomon Islands	...	
						St. Kitts and Nevis	...	
						St. Lucia	...	
						St. Vincent and the Grenadines	...	
						Tonga	...	
						Vanuatu	...	
<b>SMALL</b>	Eritrea	14%	Lesotho	39%	Gambia, The	60%	Liberia	...
	Congo, Rep.	13%	Guinea-Bissau	35%	Swaziland	52%	Trinidad and Tobago	...
	Mauritania	11%	Mauritius	35%	Togo	45%		
	Botswana	10%	Namibia	30%	Central African Republic	45%		
		Jamaica	29%					
		Gabon	22%					
<b>MEDIUM</b>	Zimbabwe	17%	Sierra Leone	40%	Niger	52%	Haiti	...
	Guinea	15%	Dominican Republic	32%	Mali	50%	Somalia	...
	Malawi	13%	Chad	30%	Benin	43%		
	Angola	8%	Burundi	29%				
			Senegal	27%				
			Burkina Faso	26%				
			Papua New Guinea	25%				
			Zambia	25%				
		Rwanda	24%					
<b>LARGE</b>	Mozambique	18%	Côte d'Ivoire	34%	Madagascar	54%		
	Cameroon	17%	Congo, Dem. Rep.	32%	Uganda	50%		
	Kenya	12%	Tanzania	29%	Sudan	44%		
	South Africa	4%	Ghana	28%				
		Ethiopia	26%					
<b>VERY LARGE</b>				Nigeria	49%			

Key: Low adjustment: Trade Tax/Total Revenue < 20%; Medium adjustment: 20% to 40%; High adjustment: > 40%; Other: data not available (...)



*Approximating costs of fiscal adjustment*

In table 4.2 we summarise the aims and components of a number of World Bank projects aimed at fiscal reform and/or tax administration reform. These illustrate the type of institutional, infrastructural, training and outreach activities that are likely to be involved with non-trade tax reform and tax administration reform required to offset the fiscal declines associated with EPA implementation. The dates of these projects and the project costs (in US dollars) are set out in Appendix 2. We also classify these countries according to country size and degree of trade tax dependence. From these we can directly map into the cell or category cost estimates (as illustrated earlier in table 3.1). To do so we need to convert the dollar valuation in euros (at the current conversion of \$1 = €0.828) and to re-value with an adjustment for inflation from the start of the project date identified in Appendix 2 to 2005 (at an assumed inflation rate of 2.5%).

Table 4.2 Fiscal Adjustment Projects

<b>Country</b>	<b>Project title</b>	<b>Aims/Objectives</b>	<b>Components</b>
Mauritania (F <sub>1</sub> )	Fiscal Reforms Support Operation	To undertake a substantial harmonization of tax and tariffs policies and investment incentives to facilitate its integration into the regional and world economies	<ol style="list-style-type: none"> <li>1. Strengthening tax administration</li> <li>2. Broadening the tax base</li> <li>3. Reducing/eliminating tax and customs duty exemptions</li> </ol>
Tanzania (F <sub>2</sub> )	Tax Administration Reform	To support the Tanzania Revenue Authority (TRA) in increasing revenues accruing to Government, without increasing tax rates	<ol style="list-style-type: none"> <li>1. Capacity building/institutional development</li> <li>2. Provision of infrastructure and equipment to TRA tax offices and customs facilities</li> <li>3. Training and Computerization</li> <li>4. Support to public awareness/education programs</li> <li>5. Support to review/amend laws and regulations</li> </ol>

Pakistan (F <sub>3</sub> )	Tax Administration Reform	To redress major shortcomings in tax administration	<ol style="list-style-type: none"> <li>1. Management and Institutional Development</li> <li>2. Improving Revenue Operations (Direct Tax, Sales Tax, Customs Excise and Customs Duty)</li> <li>3. Strengthening Revenue Services (Audit, Voluntary and Enforced Collection, Appeals and Dispute Resolution, National Intelligence and Risk Management, and Customs and Tax Frauds)</li> <li>4. Creating a Tax Compliant Culture</li> <li>5. Adopting Responsive IT Systems</li> <li>6. Infrastructure Up-gradation and Development</li> <li>7. Project Management and Implementation</li> </ol>
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Table 4.3 sets out the resulting grid of fiscal adjustment cost estimates. The codes for illustrative projects from table 4.2 (e.g. F1 represents the fiscal reforms support operation for Mauritania) are used to label the actual cost of these projects (in euros at 2005 equivalent prices).

Table 4.3 Fiscal Adjustment Cost Estimates (in mill €)

		Degree of Adjustment		
		Low	Medium	High
Country Size	Micro	15	20	30
	Small	(29.5) 30 (F <sub>1</sub> )	40	50
	Medium	40	50	70
	Large	60	€72.6 mill (F <sub>2</sub> )70	90
	Very Large	€126.5 mill (F <sub>3</sub> )125	135	155

For the purposes of recording the costs we crudely ‘round’ the relevant cost estimates, and interpolate to ensure the ranking of costs explained with chapter 3 (i.e. increasing costs with country size and with the degree of adjustment). Note however that there is also a significant degree of non-linearity, given the population bands used to define country size types; for a given category of the degree of adjustment involved, the recorded adjustment cost falls much more slowly than population size does. This captures the important fixed cost element of adjustment costs, i.e. costs that are invariant with country size.



## 5. Trade Facilitation and Export Diversification

Accumulated experience of exporting across a wide range of export products is usually viewed indicating that countries have institutions (private and public sector) and an infrastructure that are conducive to exporting. Many developing countries have an undiversified export structure, having acquired experience and understanding of exporting a narrow range of traditional exports (from natural resources or land-based activities). The diversification of exports into non-traditional manufacturing activities may require knowledge of different markets (new commercial contacts etc) and market access conditions (e.g. product standard requirements), and require improved customs procedures (e.g. to speed up access to intermediate inputs) and changes in transport facilities (e.g. refrigeration facilities at airports). The actual requirements will vary across countries as the pattern of comparative advantage and export potential and initial conditions vary. It should be noted that this is a quite narrow view of trade facilitation. Major infrastructure developments to improve transportation systems may require much larger and more expensive trade facilitation programmes. The proxy used of the need for degree of trade facilitation support and export diversification required to support the expansion of ACP exports to the EU is the share in exports of manufactured exports; the lower the proportion the greater the presumed need for support with export diversification.

### *Classifying countries according to degree of export diversification required*

Taking the information in Appendix 1 on the percentage share of manufactured exports in total commodity exports, we classify ACP countries (see table 5.1) as low adjustment (>25%), medium adjustment (10-25%) and high adjustment (<10%) countries.

### *Estimating costs of trade facilitation and export diversification*

In table 5.2 the aims and components of a number of World Bank projects aimed at trade facilitation and export development are summarised. Again these illustrate a range of activities to reduce international transaction costs and accelerate the export supply response to trade policy reform (though as indicated above they illustrate projects where trade facilitation is relatively narrowly defined). The dates of these projects and the project costs are set out in Appendix 2, which also gives information on the countries' size and degree of export diversification. Again this provides a basis for matching and establishing the approximate costs of diversification in the context of adjusting to an EPA.

(Again we adjust the project costs from the appendix for inflation effects and convert into euros.)

Table 5.1 DEGREE OF EXPORT DIVERSIFICATION REQUIRED

Country Size	LOW ADJUSTMENT		MEDIUM ADJUSTMENT		HIGH ADJUSTMENT		OTHER	
	Country	Manufac X%	Country	Manufac X%	Country	Manufac X%	Country	Manufac X%
<b>MICRO</b>	St. Lucia	26%	Suriname	14%	Seychelles	1%	Comoros	...
	Dominica	31%	Belize	18%	Cape Verde	3%	Djibouti	...
	Bahamas, The	31%			Grenada	4%	Equatorial Guinea	...
	Fiji	35%			Solomon Islands	4%	Kiribati	...
	Barbados	59%			Tonga	4%	Micronesia, Fed. Sts.	...
	St. Kitts and Nevis	73%			Guyana	9%	Palau	...
	Samoa	81%			St. Vincent and the Grenadines	10%	São Tomé and Príncipe	...
							Vanuatu	...
<b>SMALL</b>	Central African Republic	40%	Gambia, The	17%	Liberia	1%	Eritrea	...
	Togo	43%			Gabon	2%	Lesotho	...
	Trinidad and Tobago	46%			Guinea-Bissau	3%		
	Namibia	52%			Congo, Rep.	3%		
	Jamaica	64%			Mauritania	6%		
	Mauritius	73%						
	Swaziland	76%						
	Botswana	91%						
<b>MEDIUM</b>	Guinea	28%	Malawi	10%	Burundi	1%	Angola	...
	Sierra Leone	32%	Zambia	14%	Mali	2%	Somalia	...
	Dominican Republic	34%	Chad	18%	Papua New Guinea	2%		
	Zimbabwe	38%	Burkina Faso	19%	Niger	3%		
	Senegal	51%			Rwanda	3%		
	Haiti	85%			Benin	6%		
<b>LARGE</b>	South Africa	63%	Ethiopia	14%	Sudan	3%		
	Congo, Dem. Rep.	75%	Madagascar	14%	Cameroon	7%		
			Ghana	16%	Mozambique	8%		
			Tanzania	17%	Uganda	8%		
			Côte d'Ivoire	21%				
			Kenya	24%				
<b>VERY LARGE</b>					Nigeria	0%		

Key: Low adjustment: % Manufactures exports (MX%) > 25%; Medium adjustment: 10% to 25%; High adjustment: < 10%; Other: data not available (...)

Table 5.2 Trade Facilitation Projects

Country	Project title	Aims/Objectives	Components
Moldova (TF1)	Trade and Transport Facilitation	<ol style="list-style-type: none"> <li>1. To reduce non-tariff costs to trade and transport.</li> <li>2. To increase revenue and compliance, and reduce smuggling and corruption at border crossings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improve operations at pilot sites by assisting in preparing automated procedures to collect management data; to implement new border processing procedures and practices, and providing technical assistance and training.</li> <li>2. Install and implement an Automated System for Customs Data) clearance system, support technical assistance and training, training equipment, and computerise the Customs Department</li> <li>3. Implement a transit and inland control system through mobile intervention squads.</li> <li>4. Improve border crossing facilities and setting up secondary inspection areas.</li> <li>5. Facilitate trade by strengthening the private-public partnership</li> </ol>
Cambodia (TF2)	Trade Facilitation and Competitiveness	<ol style="list-style-type: none"> <li>1). To reduce trade and investment transaction costs.</li> <li>2) To introduce transparency in investment processes, and facilitate access to export markets.</li> </ol>	<ol style="list-style-type: none"> <li>1. Application of appropriate IT to border management activities to streamline operations, improve transparency and accountability.</li> <li>2. Finance technical support to establish the exporter assistance window; a technical assistance matching grant facility that would cover 50 percent of the cost of achieving market standards.</li> <li>3. Financing a program of capacity building to implement the Law on Concessions and the Amended Law on Investment.</li> </ol>
Ecuador (TF3)	International Trade and Integration	To promote increased socio-economic growth through international trade development and integration with the global economy.	<ol style="list-style-type: none"> <li>1. Modernise international trade management and increase market access through human resource training, renovate office facilities, and implement unfair trade practices safeguards and make regulations WTO-consistent.</li> <li>2. Facilitate entrepreneurial learning and innovation in smaller firms through private-public partnership institutions, and financing of an eco-export program to assist firms in export market penetration.</li> </ol>

Colombia (TF4)	Export Development	To accelerate the export supply response to Colombia's trade reform program	<ol style="list-style-type: none"> <li>1. Adjusting existing Government trade policy and administration in the areas of duty exemptions and indirect tax rebates, antidumping, and customs so as to facilitate exporter competitiveness and be GATT-consistent;</li> <li>2. Increasing the quality of export promotion, restructuring the Government's public promotion organisation and deregulating and developing trading companies;</li> <li>3. Building export financing capacity by establishing new export finance services and policies in the Foreign Trade Bank, establishing private/public joint venture pre-shipment export credit guarantee and export credit insurance facilities, and providing trade finance training to local banks; and</li> <li>4. Initiating capital markets development with regulatory and institutional improvements.</li> </ol>
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Table 5.3 records the resulting grid of export diversification adjustment costs; with the actual costs of TF1, TF3 and TF4 shown in the appropriate cells and with estimated costs (in million € at 2005 equivalent prices) allocated to the other cells ‘rounding’ and using the ordering principles referred to in the previous chapter. Again although the amounts are non-linear in absolute costs (increasing with country size), they imply significant non-linearities (decreasing with country size) on a per-capita basis.

Table 5.3 Trade Facilitation Cost Estimates (in mill €)

		Degree of Adjustment		
		Low	Medium	High
Country Size	Micro	5	10	30
	Small	12	25	45
		€8.4 mill (TF1)		
	Medium	20	45	65
			€43.0 mill (TF3)	
	Large	50	65	90
	Very Large	100	130	140
		96.4 (TF4)		

## **6. Production and Employment Adjustment**

The extent of the displacement of domestic production (and the resulting dislocation of workers) following the liberalisation of imports from the EU in anyone ACP country will depend upon a range of factors. It will of course be fashioned by the speed of the lowering of tariffs and by the extent to which sensitive sectors are excluded (temporarily or permanently) from the liberalisation. It will also depend on the scale of the domestic tradeables or import-competing sector; the larger and more diversified is this sector the greater the potential dislocation of production and employment. It is probably unwise for governments to seek to directly compensate all factors of production (owners of capital and workers) for all shocks (irrespective of whether they are caused by policy change or by exogenous factors). There are a lot of potential sources of such need for adjustment, and the existence of mechanisms of compensation is likely to encourage a general resistance to change. It is rather greater capacity to change and adjust that all economies need to develop, especially in a more open and globalised world. Further it would be rather unfair to develop adjustment assistance schemes that are directed at compensating dislocation or assisting relocation from only one specific source; i.e. trade adjustment assistance or in the specific case EPA-trade adjustment assistance at the expense of developing adjustment assistance in general. The experience of trade adjustment assistance schemes in the developed countries (e.g. in the USA and Sweden) has not been a good one, with limited evidence of facilitating adjustment and of cost effectiveness. What should be encouraged rather is the development of schemes and programmes that increase the willingness to adjust (e.g. through the provision of social safety needs for all dislocated workers or improved employment services) and to be mobile (e.g. through support with re-training or skills-upgrading).

It might have been appropriate to assess the extent of the need for employment support and promotion measures through a review of labour market policies across the ACP countries. The data for this was not readily and comprehensively available and was beyond the scope of the present work. Instead, therefore, we presume that there is a very broad need for strengthening provision in this area, and proxy the degree potential adjustment within the tradeables or import-competing sectors of the ACP countries by the share of industrial production in GDP; the greater the share the greater the potential for employment and production adjustment from an EPA.

*Classifying countries according to degree of industrialisation*

Using the information in Appendix 1 on the percentage share of industrial production in GDP, we repeat the grouping of ACP countries by size and degree of industrialisation; countries with >40% share of industrial production re classified as high adjusters, 20-40% as medium adjusters and <20% as low adjusters. The resulting groupings are set out in table 6.1.

Table 6.1 Degree of Employment Adjustment Required

Country Size	LOW ADJUSTMENT		MEDIUM ADJUSTMENT		HIGH ADJUSTMENT		OTHER	
	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP
<b>MICRO</b>	St. Lucia	18%	Bahamas, The	36%	Equatorial Guinea	89%	Comoros	...
	Tonga	15%	Seychelles	36%			São Tomé and Príncipe	...
	Djibouti	14%	Guyana	29%			Kiribati	...
	Palau	13%	St. Kitts and Nevis	28%			Micronesia, Fed. Sts.	...
	Vanuatu	9%	Fiji	27%			Samoa	...
			St. Vincent and the Grenadines	24%			Solomon Islands	...
			Grenada	23%				
			Dominica	21%				
			Barbados	21%				
			Cape Verde	20%				
			Belize	20%				
			Suriname	20%				
	<b>SMALL</b>	Gambia, The	14%	Jamaica	31%	Congo, Rep.	63%	Liberia
Guinea-Bissau		13%	Namibia	31%	Swaziland	50%		
			Mauritius	31%	Trinidad and Tobago	49%		
			Mauritania	29%	Botswana	48%		
			Eritrea	25%	Gabon	46%		
			Central African Republic	22%	Lesotho	43%		
			Togo	22%				
<b>MEDIUM</b>	Burundi	19%	Guinea	37%	Angola	68%	Somalia	...
	Burkina Faso	19%	Dominican Republic	33%	Papua New Guinea	42%		
	Chad	17%	Sierra Leone	32%				
	Niger	17%	Mali	30%				
	Haiti	17%	Zambia	26%				
	Malawi	15%	Zimbabwe	24%				
	Benin	14%	Senegal	22%				
<b>LARGE</b>	Congo, Dem.Rep.	19%	Rwanda	21%				
	Kenya	19%	Mozambique	34%				
	Sudan	18%	South Africa	32%				
	Tanzania	16%	Côte d'Ivoire	30%				
	Madagascar	13%	Ethiopia	30%				
			Ghana	24%				
<b>VERY LARGE</b>			Uganda	22%				
			Cameroon	20%				
		Nigeria	29%					

Key: Low adjustment: Indus. Prod./GDP < 20%; Medium adjustment: 20% to 40%; High adjustment: > 40%; Other: data not available (...)

Table 6.2 Production and Employment Adjustment

Country	Project title	Aims/Objectives	Components
Bosnia-Herzegovina (PE1)	Employment Support II	<ol style="list-style-type: none"> <li>1. To provide employment services for an estimated 10,000 people who are either recently retrenched and above 45 years of age and/or those who are actively seeking jobs for two or more years</li> <li>2. To bring behavioral change and business change in the employment services.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improving the employment services on matching employers with job vacancies to appropriately skilled active job seekers; and on providing, through private sector service providers, income earning opportunities to active job seekers and to the hardcore unemployed based on the experience of the Pilot Emergency Labor Redeployment Project.</li> <li>2. Upgrading and strengthening the Public Employment Services (PES) capacity to provide and outsource job brokerage and employment services programs through the development of effective procedures, clear guidelines and regulations, staff training and the piloting of analytical labor market information systems including introducing labor market research units in the Ministries of Labor.</li> <li>3. Supporting project implementation and coordination between all partners in the Second Employment Support Project (SESP).</li> </ol>
Serbia and Montenegro (PE2)	Employment Promotion	To improve the efficiency of labor programs, by piloting and testing new approaches and innovative labor redeployment programs, offering and employment services in selected areas.	<ol style="list-style-type: none"> <li>1. Design of Labor Redeployment Activities, in order to reintegrate displaced workers into the labor market, and mitigate the social costs of enterprise restructuring, through the development of new policies, institutional arrangements, and labor redeployment programs.</li> <li>2. Piloting reforms in Public Employment Services, will design, pilot, and evaluate cost effective public employment services, to assist the unemployed re-enter the labor market, through improved employment services, search assistance programs, and small business advisory services.</li> <li>3. Labor market information, and evaluation - social impact of restructuring and effects of Active Labor Market Programs, will develop a comprehensive system of labor market information to assess the effects of labor market programs, through the provision of training, services and goods.</li> <li>4. Assistance to the Ministry of Labor and Employment (MOLE) in Project management, through the provision of training, goods and services, including the audit of accounts, and financial statements.</li> </ol>

*Approximating the costs of production and employment adjustment*

Table 6.2 summarises a couple of World Bank projects aimed at improving employment support and promotion services; ones predominantly aimed at supporting policy and institutional development within the public sector. (Note that the support measures for skills and productivity enhancement to be discussed in the next section will have a much greater private sector focus, and in many senses are not separate from the adjustment support measures discussed here.) The characteristics (size and degree of industrialisation) of the two countries in table 6.2 (PE1 and PE2) are provided in appendix 2, as are the project costs (in US \$) and project start dates. Converting into €euros and adjusting for inflation as indicated earlier, we have project PE1 costed at €1.9 million as an example of a small country with medium adjustment needs and project PE2 as a medium size country with medium adjustment needs costed at €22 million. We again therefore use these as our guides for the costing of ACP-focussed (EPA) employment adjustment projects, and interpolate the cost grid for the other categories. This cost grid is given in table 6.3.

Table 6.3 Production and Employment Adjustment Cost Estimates (in mill €)

		Degree of Adjustment		
		Low	Medium	High
Country Size	Micro	4	6	15
	Small	10	12	25
			€1.9 million (PE1)	
	Medium	20	25	40
			€22 mill (PE2)	
	Large	40	50	65
	Very Large	80	100	125

## **7. Skills Development and Productivity Enhancement**

The opening of the ACP countries to more intense competition from EU producers will increase both the pressures to increase competitiveness in existing areas of production and to shift resources towards new areas of production. Increasing competitiveness of existing production is likely to require increases in productivity; improvements in the organisation of production processes, better utilisation of capital and labour, innovation in product design and characteristics, improvements in management, financial and marketing methods, and enhancements in human capital and skills. The shift of resources is likely to require new employment skills and the new entrant of new businesses into these markets. Enhancement of public and private sector capacity to deliver training for workers and managers and to induce greater private sector involvement in training and the innovation process will be required if EPA is to bring the benefits of increased growth. Again this is a multi-faceted aspect of the adjustment process, and capacity and conditions will vary considerably across the ACP countries. We take a crude indicator of human capital or education system development, namely secondary school enrolment rates, as our indicator of the degree of adjustment in the capacity of each country to respond to the EPA-induced need to improve skills and productivity; the lower the enrolment rate the greater the need with adjustment support.

### *Classifying countries according to coverage of secondary education*

Gross secondary enrolment rates across the ACP are set out in Appendix 1. Continuing with the criteria used in the previous sections for grouping countries according to country size, we further sub-divide countries according to the secondary enrolment rates; enrolment rates over 60% are classified as low adjusters, between 30% and 60% as medium adjusters and less than 30% as high adjusters. The resulting grouping of countries is given in table 7.1.

Table 7.1 Degree of Skills / Productivity Enhancement Required

Country Size	LOW ADJUSTMENT		MEDIUM ADJUSTMENT		HIGH ADJUSTMENT		OTHER	
	Country	Sec.Sch.Enrlmt%	Country	Sec.Sch.Enrlmt%	Country	Sec.Sch.Enrlmt%	Country	Sec.Sch.Enrlmt%
<b>MICRO</b>	Cape Verde	68.60%	Equatorial Guinea	31.20%	Djibouti	14.70%	Bahamas, The	...
	Belize	71.60%	Suriname	50.70%	Comoros	20.60%	Dominica	...
	Samoa	76.00%			Vanuatu	28.50%	Fiji	...
	Guyana	81.00%					Grenada	...
	St. Lucia	94.30%					Kiribati	...
	Barbados	100.00%					Micronesia, Fed. Sts.	...
							Palau	...
<b>SMALL</b>	Namibia	59.80%	Togo	36.20%	Mauritania	18.40%	Central African Republic	...
	Swaziland	60.00%	Gabon	54.40%	Guinea-Bissau	20.40%	Congo, Rep.	...
	Trinidad and Tobago	78.40%			Liberia	22.50%		
	Botswana	81.80%			Gambia, The	27.00%		
	Jamaica	83.60%			Lesotho	28.00%		
	Mauritius	100.00%			Eritrea	28.20%		
<b>MEDIUM</b>	Dominican Republic	66.40%	Malawi	45.20%	Niger	6.50%	Haiti	...
			Zimbabwe	45.30%	Burundi	7.10%	Somalia	...
					Burkina Faso	10.00%		
					Chad	11.50%		
					Rwanda	12.10%		
					Guinea	13.80%		
					Mali	15.00%		
					Angola	15.50%		
					Senegal	19.50%		
					Papua New Guinea	21.20%		
					Benin	21.80%		
					Sierra Leone	23.90%		
					Zambia	25.50%		

Country Size	LOW ADJUSTMENT		MEDIUM ADJUSTMENT		HIGH ADJUSTMENT		OTHER	
	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP	Country	Indus.Prod/GDP
<b>LARGE</b>	South Africa	90.20%	Ghana	37.30%	Ethiopia	5.20%	Uganda	...
					Tanzania	5.30%		
					Mozambique	13.90%		
					Madagascar	14.30%		
					Congo, Dem. Rep.	18.40%		
					Cameroon	19.60%		
					Côte d'Ivoire	21.70%		
					Sudan	28.80%		
					Kenya	29.90%		
<b>VERY LARGE</b>							Nigeria	...

Key: Low adjustment: Enrolment ratio > 60%; Medium adjustment: 30% to 60%; High adjustment: < 30%; Other: data not available (...)

*Approximating costs of enhancing skills and productivity*

Table 7.2 summarises a number of World Bank projects in specific countries on skills and competitiveness development. These illustrate the type of policy, institutional and public/private sector projects that might be needed in any ACP country to adjust to and benefit from an EPA. The dates of these projects and the project costs are also recorded in appendix 2, as are the characteristics (size and secondary school enrolment rates) of these countries. Again we use this to anchor the estimated costing for all the cells in the cost grid; amending, as earlier, for the currency of valuation and for inflation. The resulting cost estimates are summarised in table 7.3.

There is some inconsistency of the ranking of costings. We decide to take projects SP1 and SP3 as our base reference costings for the “micro-small” combination and “medium-medium” combination. This may, but only may, upwardly bias the estimates for “micro” states (<1million population). But it should be noted that the interpolated values for the very large category are considerably smaller than the actual costings for SP5.

Table 7.2 Skills / Productivity Enhancement Projects

Country	Project title	Aims/Objectives	Components
Cape Verde (SP1)	Growth and Competitiveness	To increase private sector's competitiveness and participation in economic growth.	<ol style="list-style-type: none"> <li>1. Financial sector reform, including pension reform.</li> <li>2. Investment climate reform, which includes, but is not limited to: tax reform, alleviation of administrative barriers, improved supply chains, and legal reform.</li> <li>3. Post privatisation and divestiture reforms; and</li> <li>4. Private sector and institutional capacity building.</li> </ol>
Croatia (SP2)	Technical Assistance Project for Institutional and Regulatory Reform for Private Sector Development	Encouragement for private sector development, as specified by the Country Assistance Strategy (CAS), through business improvement, conducive to private sector growth.	<ol style="list-style-type: none"> <li>1. Creation of regulatory and institutional frameworks for public utilities, to include advisory services for the design of a new organizational structure, and development of detailed regulations, to assist the Office for the Restructuring and Economics of State-owned Enterprises (ORESE).</li> <li>2. Strengthening of the Agency for the Protection of Market Competition (APMC), will be accomplished through the provision of advisory services, for the development of secondary legislation for the 1995 Competition Law. Assistance will support the development plan for the APMC, in compliance with the Competition Law.</li> <li>3. Institutional strengthening assistance for financial and statistical agencies.</li> </ol>
Honduras (SP3)	Enhancing Competitiveness: Trade Facilitation and Productivity Improvement	To improve the investment climate and local firms's capacity to export.	<ol style="list-style-type: none"> <li>1. Improving critical elements of the investment climate.</li> <li>2. Promoting private sector innovation.</li> <li>3. Improving the skills of the labour force.</li> <li>4. Promoting local development in selected pilot areas.</li> <li>5. Developing a communication campaign on themes related to competitiveness; and</li> <li>6. Financing the Project Implementation Unit (PIU).</li> </ol>

Egypt (SP4)	Skills Development Project	To stimulate demand for skills training development among private small and medium-sized private sector enterprises (SMEs).	<ol style="list-style-type: none"> <li>1. Implement awareness programs, provide technical advisory services to promote outreach programs; monitoring and evaluation surveys and assessments; enable beneficiary firms to undertake training needs assessments, plans, develop training proposals.</li> <li>2. Finance a demand-driven training program on a cost-shared basis with beneficiary small and medium size enterprises, and, strengthen the institutional capacity of project intermediaries; Support short term production-related in-service training and training for prospective employees.</li> <li>3. Finance goods and technical advisory services to strengthen the institutional capacity of the Project Management Unit.</li> </ol>
Mexico (SP5)	Innovation for Competitiveness: 1st Phase	To improve the competitiveness of the Mexican economy.	<ol style="list-style-type: none"> <li>1. Strengthening the innovative capacity of the private sector.</li> <li>2. Accelerating advanced human capital formation.</li> <li>3. Increasing the international integration of the innovation system.</li> </ol>

Table 7.3 Skills Enhancement and Productivity Adjustment Cost Estimates

		(in mill €)		
		Degree of Adjustment		
40		Low	Medium	High
	Micro	10 €1.7 mill (SP1)	15	30
	Small	15	20 €7.7 million (SP2)	35
	Medium	20	30 €8.7 mill (SP3)	45
	Large	40 €10.9 mill (SP4)	50	65
	Very Large	80 €308.6 mill (SP5)	100	130

## 8. Negotiation and Legislative Costs

The methodology for identifying adjustment costs (as set out in the previous chapters) implicitly incorporates the costs altering legislation needed in each of the area.<sup>4</sup> We do not here seek therefore to separately identify the specific legislative costs; doing so would in any case be extremely difficult.

As argued earlier, the process of negotiating an EPA also imposes training, capacity building and direct negotiating time and costs. The 9<sup>th</sup> European Development Fund (EDF) did provide funds for supporting capacity building and EPA negotiations. To the extent that some of that support for ACP trade capacity contributes to easing the adjustment costs of an EPA, the contribution might be deducted from the earlier costs estimates. By contrast, if the final negotiation costs will exceed the EDF funding thus far provided, then further funding will need to be added in.

### *Current trade-related assistance to the ACP*

Trade related assistance (TRA) for the ACP has thus far been mainly provided under the 9<sup>th</sup> European Development Fund (EDF – implemented from 2003 to 2007). This amounted to some €650 m. TRA sought to support the ACP in their efforts to deal with trade policy issues (WTO, EPA, regional etc.), to mainstream trade into their development policies and create the conditions to actually benefit from trade opportunities. TRA to the ACP has provided at three different and complementary levels:

1. At an all ACP level there has been several facilities that cover mostly short term needs or needs in specific trade related areas (e.g. sanitary and phytosanitary requirements). These facilities are accessible to all ACP countries upon submission of requests.
  - 1a **Facility to support EPA negotiations** (€24 Million) funded EPA related studies, technical support, meetings and training throughout the ACP.
  - 1b **Facility to support ACP countries in WTO negotiations** (€12 Million) has supported ACP with WTO related technical assistance, training and meetings.

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<sup>4</sup> Note that this is not the case for the alternative methodology (in Appendix 3) for measuring adjustment costs. In that case the cost of negotiations and legislative changes would need to be added on.

1c **Trade.Com** (€ 50 million) is a major general capacity strengthening measure funding a network of some 55 regional and national trade advisors throughout the ACP. Further components are helping ACP countries to identify their needs, strengthen local research capacity and help implement pilot projects including in the area of sanitary and phytosanitary requirements.

1d **Pesticides Initiative** (€ 29 million) assisted ACP companies and professional organisations since 2003 in the specific area of complying with EU rules on pesticides residues. The programme has also helped ensure that specific needs of ACP are taken into account in EU phytosanitary regulations.

1e **Fisheries programme** (€ 42 million) provides specific support since 2003 to improve sanitary conditions of fish exports.

(Total €150m)

2. The larger amount of TRA support has provided under the regional indicative programmes in line with the ACP EU priority attached to regional integration. Funding under the regional programmes has served mainly to support regional trade and economic integration, participation of the regions in the EPA process and capacity building. Allocations for regional integration and trade to the individual regions are as follows:

Caribbean: €50 million

Eastern Africa: €111 Million

Southern Africa: €40 million

West Africa: €120 million

Central Africa: €15-20 million

Pacific: €9 Million.

(Total €350 m)

3. At the national level, several ACP have additional funding earmarked for projects complementing those funded under the all ACP and regional programmes. Estimated total amount: €150 m.

### *Contribution to Adjustment Costs?*

Of the €626 million (i.e. total TRA above less facility to support EPA negotiations) some should be viewed as supporting specific aspects of EPA adjustment, in particular trade facilitation and export diversification (i.e. items 1c, 1d and 1e above). However some of the other funding clearly was directed at other issues (e.g. items 1b for WTO negotiations). For other items there is some ambiguity. The regional programmes are to support regional trade and integration, as well as the regions participation in the EPA process. To the extent that this latter feature of the regional programmes is more to do with capacity building for the EPA negotiations rather than EPA adjustment assistance one may well exclude it from the present calculation of adjustment costs. One might conclude therefore that only €121 million of EDF (9) should be viewed as contributing to the trade facilitation costs of EPA adjustment.

## **9. Overall Implementation and Adjustment Costs**

The final step in the study's methodology is to aggregate across the individual components of the costs of adjustment. A summary of the classifications for each ACP country according to size and whether they were classified as relatively low, medium or high potential adjusters (or other where data prevented classification) are set out in table 9.1. The classification is given for each of the four broad categories of adjustment costs (fiscal adjustment, trade facilitation/export diversification, production/employment and skills/productivity enhancement). (Note that we classify South Africa, but do not include it in the cost estimations since South Africa has already negotiated a free trade arrangement with the EU.

Given the crude nature of the proxies for classifying the degree of adjustment and for the interpolation of costings for the differentiation of countries by degree of adjustment, we do not place much weight on the aggregation of costs for each individual ACP country. These are reported in Appendix 3 for completeness. It should be recalled also that where countries were unclassified by adjustment degree for data deficiency reasons then these were allocated to the medium adjustment category. The recorded country total may therefore under- or over-state the adjustment cost for that specific country. When we aggregate across countries, however, one can expect that this bias will be reduced on the principle of off-setting errors. The total costs estimates for each category of costs and overall should therefore be more reliable. We summarise these in table 9.2 below.

Table 9.1 List of ACP Countries By Types And Extent of Adjustments Required\*

No.	Country		Fiscal Adjustment				Trade Facilitation/Export Diversification				Production/Employment Adjustment				Skills / Productivity/Enhancement			
			Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other
1	Benin	MEDIUM			x			x		x							x	
2	Burkina Faso	MEDIUM		x				x		x							x	
3	Burundi	MEDIUM		x				x		x							x	
4	Cameroon	LARGE	x					x			x						x	
5	Central African Republic	SMALL			x		x				x							x
6	Chad	MEDIUM		x				x		x							x	
7	Comoros	MICRO			x				x					x			x	
8	Congo, Dem. Rep.	LARGE		x			x			x							x	
9	Congo, Rep.	SMALL	x					x					x					x
10	Côte d'Ivoire	LARGE		x				x			x						x	
11	Eritrea	SMALL	x						x		x						x	
12	Ethiopia	LARGE		x				x			x						x	
13	Gambia, The	SMALL			x			x		x							x	
14	Ghana	LARGE		x				x			x					x		
15	Guinea	MEDIUM	x				x				x						x	
16	Guinea-Bissau	SMALL		x				x		x							x	
17	Haiti	MEDIUM				x	x			x								x
18	Kenya	LARGE	x					x		x							x	
19	Lesotho	SMALL		x					x				x				x	
20	Liberia	SMALL				x		x						x			x	
21	Madagascar	LARGE			x			x		x							x	
22	Malawi	MEDIUM	x					x		x						x		
23	Mali	MEDIUM			x			x			x						x	
24	Mauritania	SMALL	x					x			x						x	
25	Mozambique	LARGE	x					x			x						x	
26	Niger	MEDIUM			x			x		x							x	
27	Nigeria	V.LARGE			x			x			x							x
28	Papua New Guinea	MEDIUM		x				x					x				x	
29	Rwanda	MEDIUM		x				x			x						x	
30	São Tomé and Príncipe	MICRO	x						x					x				x
31	Senegal	MEDIUM		x			x				x						x	
32	Sierra Leone	MEDIUM		x			x				x						x	
33	Somalia	MEDIUM				x			x					x				x
34	Sudan	LARGE			x			x		x							x	
35	Tanzania	LARGE		x				x		x							x	

36	Togo	SMALL			x		x					x				x		
37	Uganda	LARGE			x				x			x						x

... continued

No.	Country		Fiscal Adjustment				Export Diversification				Employment Adjustment				Skills / Productivity			
			Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other
38	Zambia	MEDIUM		x				x				x					x	
39	Zimbabwe	MEDIUM	x				x					x				x		
40	Angola	MEDIUM	x						x				x				x	
41	Cape Verde	MICRO			x				x			x			x			
42	Djibouti	MICRO	x							x	x						x	
43	Dominican Republic	MEDIUM		x			x					x			x			
44	Fiji	MICRO				x	x					x						x
45	Guyana	MICRO	x						x			x			x			
46	Jamaica	SMALL		x			x					x			x			
47	Kiribati	MICRO				x				x				x				x
48	Micronesia, Fed. Sts.	MICRO				x				x				x				x
49	Namibia	SMALL		x			x					x			x			
50	Samoa	MICRO				x	x							x	x			
51	Solomon Islands	MICRO				x			x					x				x
52	Suriname	MICRO		x				x				x				x		
53	Swaziland	SMALL			x		x						x		x			
54	Tonga	MICRO				x			x		x							x
55	Vanuatu	MICRO				x				x							x	
56	Barbados	MICRO				x	x					x			x			
57	Belize	MICRO				x		x				x			x			
58	Botswana	SMALL	x				x							x	x			
59	Dominica	MICRO				x	x					x						x
60	Equatorial Guinea	MICRO	x							x			x			x		
61	Gabon	SMALL		x					x				x			x		
62	Grenada	MICRO				x			x			x						x
63	Mauritius	SMALL		x			x					x			x			
64	Palau	MICRO				x				x	x							x
65	Seychelles	MICRO			x				x			x						x
66	South Africa	LARGE	x				x					x			x			
67	St. Kitts and Nevis	MICRO				x	x					x						x
68	St. Lucia	MICRO				x	x				x				x			
69	St. Vincent and the Grenadines	MICRO				x			x			x						x
70	Trinidad and Tobago	SMALL				x	x						x		x			
71	Bahamas, The	MICRO				x	x					x						x



Table 9.2 Summary of Estimated Adjustment Costs for ACP Countries  
(million €at 2005 equivalent prices)

	Gross	Net <sup>1</sup>
Fiscal Adjustment	3,025	3,025
Trade Facilitation/Export Diversification	2,401	2,280
Production/Employment Adjustment	1,454	1,454
Skills/Productivity Enhancement	2,265	2,265
Overall Cost	9,145	9,024

<sup>1</sup> Less €121 million provided by EDF (9) – see section 8

The overall cost of EPA adjustment is estimated to about €9 billion (at current prices). This is a substantial figure, when compared with the typical estimates of the net welfare gains of trade liberalisation episodes. These estimates abstract, however, from adjustment cost considerations, and we have relatively little empirical work to guide as to the appropriateness of this estimate.

In table 9.3 the ACP wide adjustment cost estimates are broken down by negotiating region. Note that this is a breakdown for the gross cost estimates in table 9.2, since we do not know the precise breakdown of the €121 million spending that was netted off for spending under the 9<sup>th</sup> EDF. For completeness table 9.3 also breakdowns the costs down by type of adjustment costs for each region.

Table 9.3 Estimated Adjustment Costs by Region

REGION	FISCAL ADJUSTMENT	EXPORT DIVERSIFICATION	EMPLOYMENT ADJUSTMENT	SKILLS / PRODUCTIVITY ENHANCEMENT	TOTAL ADJUSTMENT COSTS
Pacific <sup>(a)</sup>	210	175	82	175	642
CEMAC <sup>(b)</sup>	270	257	153	200	880
ECOWAS <sup>(c)</sup>	955	712	422	700	2789
ESA	825	752	415	695	2687
SADC	340	261	217	255	1073
Cariforum <sup>(d)</sup>	375	199	140	210	924
Gross Total <sup>(e)</sup>	2,975.0	2,356.0	1,429.0	2,235.0	8,995.0

Notes:

<sup>(a)</sup> excludes Cook Islands, Nauru, Niue and Tuvalu for which data not available for earlier analysis

<sup>(b)</sup> plus Sao Tome & Principe

- (c) plus Cameroon and Chad
- (d) plus Dominican Republic, but excludes Cuba and Antigua and Barbuda
- (e) Somalia excluded from above groupings, but were included in earlier analysis

In order to assess the credibility of this estimate we report in Appendix 4 on an alternative approach to assessing the adjustment assistance issue. There we ask the question about the amount of subsidy to domestic producers that would be required to avoid the adjustments that will be experienced as a result of EPA tariff liberalisation. The subsidy-equivalents reported are based on earlier detailed work for Mauritius. If the same subsidy-equivalent in proportional terms (i.e. as a proportion of GDP) as Mauritius would require to avoid EPA adjustment costs applied across all the ACP countries, the overall cost of the subsidy equivalent would be about €6 billion. It is not unreasonable to imagine that rationale governments would use policy intervention that costs less than the actual costs of adjusting to an alternative policy regime. The ordering of the magnitudes of the cost of adjustment and of the cost of avoiding adjustment are therefore appropriate.

It should be acknowledged of course that both the subsidy-equivalent and adjustment cost estimates are based on a presumed full adjustment. The exclusion of sectors from EPA liberalisation would reduce the need for adjustment and accordingly reduce the costs of adjustment that will fall on firms, workers etc in the ACP regions. The costs of the adjustment support programmes identified in this study are not likely, however, to fall in line with any reduction in the trade coverage of the EPA liberalisation, given the fixed cost elements of such programmes.

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**APPENDIX 1: LIST OF ACP COUNTRIES SHOWING INCOME GROUP, POPN SIZE, GDP AND SHARES OF MANUFACTURES EXPORTS AND TRADE TAX DEPENDENCE**

No.	Country	Popn(2004)		GDP (2004) (millions)	TrdTx/TR TTTX/TR '01	Manufac X % in Total X '02	Indus. Output as % of GDP	1999/2000	
		('000)	Size					Gross Sch. Enrolment %	Net Sec. Sch. Enrolment %
<b>Low income</b>									
1	Benin	6,890	MEDIUM	4,075	43.3%	6.0%	14.37%	21.80%	17.40%
2	Burkina Faso	12,387	MEDIUM	4,824	26.0%	19.0%	18.91%	10.00%	8.30%
3	Burundi	7,343	MEDIUM	657	28.7%	1.0%	19.00%	7.10%	...
4	Cameroon	16,400	LARGE	14,733	16.8%	7.0%	20.00%	19.60%	...
5	Central African Republic	3,947	SMALL	1,331	44.8%	40.0%	22.00%	...	...
6	Chad	8,823	MEDIUM	4,285	29.8%	17.5%	17.00%	11.50%	7.70%
7	Comoros	614	MICRO	367	41.8%	...	...	20.60%	...
8	Congo, Dem. Rep.	54,775	LARGE	6,571	32.0%	75.0%	19.00%	18.40%	11.70%
9	Congo, Rep.	3,855	SMALL	4,384	12.9%	3.1%	63.00%	...	...
10	Côte d'Ivoire	17,142	LARGE	15,286	34.3%	21.0%	30.00%	21.70%	...
11	Eritrea	4,477	SMALL	925	14.1%	...	25.00%	28.20%	22.50%
12	Ethiopia	69,961	LARGE	8,077	26.4%	14.0%	30.00%	5.20%	...
13	Gambia, The	1,449	SMALL	415	60.2%	17.0%	14.00%	27.00%	23.40%
14	Ghana	21,053	LARGE	8,620	28.4%	16.0%	24.00%	37.30%	26.10%
15	Guinea	8,073	MEDIUM	3,508	14.5%	28.0%	37.00%	13.80%	11.90%
16	Guinea-Bissau	1,533	SMALL	280	34.6%	2.7%	13.00%	20.40%	...
17	Haiti	8,592	MEDIUM	3,535	...	85.0%	16.77%	...	...
18	Kenya	32,447	LARGE	15,600	12.2%	24.0%	19.00%	29.90%	...
19	Lesotho	1,809	SMALL	1,375	39.3%	...	43.00%	28.00%	19.60%
20	Liberia	3,449	SMALL	448	...	1.3%	...	22.50%	20.30%
21	Madagascar	17,332	LARGE	4,364	54.4%	14.0%	13.00%	14.30%	11.50%
22	Malawi	11,182	MEDIUM	1,813	13.0%	10.0%	15.00%	45.20%	...
23	Mali	11,937	MEDIUM	4,863	50.0%	2.0%	30.00%	15.00%	...
24	Mauritania	2,906	SMALL	1,357	10.9%	5.5%	29.00%	18.40%	...
25	Mozambique	19,129	LARGE	5,548	17.9%	8.0%	34.00%	13.90%	7.30%
26	Niger	12,095	MEDIUM	3,081	52.4%	3.0%	17.00%	6.50%	5.80%
27	Nigeria	139,823	V.LARGE	72,106	48.5%	0.0%	29.00%	...	...
28	Papua New Guinea	5,625	MEDIUM	3,909	25.4%	2.0%	42.00%	21.20%	21.30%
29	Rwanda	8,412	MEDIUM	1,845	23.9%	3.0%	21.00%	12.10%	...
30	São Tomé and Príncipe	161	MICRO	62	18.6%	...	...	...	...
31	Senegal	10,455	MEDIUM	7,665	26.7%	51.0%	22.00%	19.50%	...
32	Sierra Leone	5,436	MEDIUM	1,075	39.8%	32.3%	32.00%	23.90%	23.90%
33	Somalia	9,938	MEDIUM	...	...	...	...	...	...
34	Sudan	34,356	LARGE	19,559	44.2%	3.0%	18.00%	28.80%	...
35	Tanzania	36,571	LARGE	10,851	29.2%	17.0%	16.00%	5.30%	4.80%
36	Togo	4,966	SMALL	2,061	45.0%	43.0%	22.00%	36.20%	23.10%
37	Uganda	25,920	LARGE	6,833	50.0%	8.0%	22.00%	...	...
38	Zambia	10,547	MEDIUM	5,389	25.2%	14.0%	26.00%	25.50%	20.70%
39	Zimbabwe	13,151	MEDIUM	17,750	16.7%	38.0%	24.00%	45.30%	42.30%

... = not available

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... continued

No.	Country	Popn(2004)		GDP (2004) (millions)	TrdTx/TR TTX/TR '01	Manufac X % in Total X '02	Indus. Output as % of GDP	1999/2000	
		('000)	Size					Gross Sec. Sch. Enrolment %	Net Sec. Sch. Enrolment %
<b>Lower middle income</b>									
40	Angola	13,963	MEDIUM	20,108	8.1%	...	68.00%	15.50%	...
41	Cape Verde	481	MICRO	948	40.6%	2.9%	19.72%	68.60%	...
42	Djibouti	716	MICRO	663	17.3%	...	14.20%	14.70%	...
43	Dominican Republic	8,861	MEDIUM	18,673	31.6%	34.0%	33.00%	66.40%	40.00%
44	Fiji	848	MICRO	2,627	...	34.5%	27.01%	...	...
45	Guyana	772	MICRO	786	12.0%	9.2%	28.58%	81.00%	...
46	Jamaica	2,665	SMALL	8,030	28.6%	64.0%	31.00%	83.60%	74.70%
47	Kiribati	98	MICRO	62	...	...	...	...	...
48	Micronesia, Fed. Sts.	127	MICRO	226	...	...	...	...	...
49	Namibia	2,033	SMALL	5,456	29.9%	52.0%	31.00%	59.80%	34.20%
50	Samoa	179	MICRO	363	...	81.4%	...	76.00%	68.40%
51	Solomon Islands	471	MICRO	242	...	3.8%	...	...	...
52	Suriname	443	MICRO	1,109	36.7%	14.0%	19.58%	50.70%	...
53	Swaziland	1,120	SMALL	2,413	52.0%	76.0%	50.00%	60.00%	37.30%
54	Tonga	102	MICRO	213	...	4.4%	15.12%	...	...
55	Vanuatu	215	MICRO	316	...	...	9.39%	28.50%	22.60%
<b>Upper middle income</b>									
56	Barbados	272	MICRO	2,627	...	59.0%	20.76%	100.00%	70.70%
57	Belize	283	MICRO	1,094	...	18.2%	19.71%	71.60%	36.00%
58	Botswana	1,727	SMALL	8,659	9.9%	91.0%	48.00%	81.80%	58.80%
59	Dominica	71	MICRO	269	...	30.6%	21.04%	...	...
60	Equatorial Guinea	506	MICRO	3,235	14.7%	...	88.92%	31.20%	26.10%
61	Gabon	1,374	SMALL	7,228	21.8%	2.0%	46.00%	54.40%	...
62	Grenada	106	MICRO	436	...	3.7%	22.63%	...	...
63	Mauritius	1,234	SMALL	6,056	34.6%	73.0%	31.00%	100.00%	72.50%
64	Palau	20	MICRO	127	...	...	12.69%	...	...
65	Seychelles	85	MICRO	704	47.0%	1.0%	36.06%	...	...
66	South Africa	45,584	LARGE	212,777	3.7%	63.0%	32.00%	90.20%	...
67	St. Kitts and Nevis	47	MICRO	397	...	73.3%	28.32%	...	...
68	St. Lucia	164	MICRO	729	...	25.6%	18.03%	94.30%	64.00%
69	St. Vincent and the Grenadines	108	MICRO	403	...	9.5%	24.41%	...	...
70	Trinidad and Tobago	1,323	SMALL	12,544	...	46.0%	48.81%	78.40%	63.80%
<b>High income: non-OECD</b>									
71	Bahamas, The	320	MICRO	5,260	...	31.2%	36.10%	...	...

... = not available

## APPENDIX 2: SELECTED INDICATORS FOR PROJECT COUNTRIES

### (A) Fiscal Adjustment Projects

Country	Project Dates	Project Costs (\$ millions)	Popn(2004) '000	Size	GDP (2004) (millions)	TrdTx/TRRev TTTX/TR '01
(F1) Mauritania	1998-2002	30.0	2,906	Small	1,357.0	10.9%
(F2) Tanzania	1996-1999	70.2	36,571	Large	10,851.0	29.2%
(F3) Pakistan	2004-2008	149.0	152,061	V.Large	96,115.0	12.0%

### (B) Trade Facilitation Projects

Country	Project Dates	Project Costs (\$ millions)	Popn(2004) '000	Size	GDP (2004) (millions)	Manufac X % in Total X '02
TF1 Moldova	2003-2007	9.7	4,218	Small	30,282.0	31.0%
TF2 Cambodia	2005-2009	12.0	13,630	Medium	4,597.0	...
TF3 Ecuador	1997-2003	42.6	13,213	Medium	30,282.0	10.0%
TF4 Colombia	1993-1999	86.6	45,300	Large	97,384.0	38.0%

### (C) Production and Employment Adjustment Projects

Country	Project Dates	Project Costs (\$ millions)	Popn(2004) '000	Size	GDP (2004) (millions)	Indus. Output as % of GDP
(PE1) Bosnia-Herzegovina	2004-2008	14.0	3,836	Small	8,121.0	37.0%
(PE2) Serbia-Montenegro	2003-2006	25.5	8,152	Medium	23,996.0	32.0%

### (D) Skills/Productivity Enhancement Projects

Country	Project Dates	Project Costs (\$ millions)	Popn(2004) '000	Size	GDP (2004) (millions)	Gross Sec. Sch. Enrolment %
SP1 Cape Verde	2003-2007	13.5	481	Micro	948.0	68.6%
SP2 Croatia	1999-2005	8.0	4,508	Small	34,200.0	...
SP3 Honduras	2004-2007	33.8	7,140	Medium	7,370.0	...
SP4 Egypt	2003-2006	12.5	68,738	Large	75,148.0	83.5%
SP5 Mexico	2006-2015	382.0	103,795	V.Large	676,497.0	73.4%

**Size** (population): **Micro:** <1 million; **Small:** 1 - 5 million; **Medium:** 5 - 15 million; **Large:** 15 – 100 million; **V.Large:** >100 million  
... = not available

**APPENDIX 3: ESTIMATED ADJUSTMENT COSTS (in million €)<sup>1</sup>**

No.	COUNTRY	FISCAL ADJUSTMENT	EXPORT DIVERSIFICATION	EMPLOYMENT ADJUSTMENT	SKILLS / PRODUCTIVITY ENHANCEMENT	TOTAL ADJUSTMENT COSTS
1	Benin	70.0	30.0	20.0	45.0	<b>165.0</b>
2	Burkina Faso	50.0	20.0	20.0	45.0	<b>135.0</b>
3	Burundi	50.0	65.0	20.0	45.0	<b>180.0</b>
4	Cameroon	60.0	90.0	50.0	65.0	<b>265.0</b>
5	Central African Republic	60.0	12.0	12.0	20.0	<b>104.0</b>
6	Chad	50.0	45.0	20.0	45.0	<b>160.0</b>
7	Comoros	30.0	10.0	6.0	30.0	<b>76.0</b>
8	Congo, Dem. Rep.	50.0	50.0	40.0	65.0	<b>205.0</b>
9	Congo, Rep.	30.0	45.0	25.0	20.0	<b>120.0</b>
10	Côte d'Ivoire	70.0	65.0	50.0	65.0	<b>250.0</b>
11	Eritrea	30.0	25.0	12.0	35.0	<b>102.0</b>
12	Ethiopia	70.0	65.0	50.0	65.0	<b>250.0</b>
13	Gambia, The	60.0	25.0	10.0	35.0	<b>130.0</b>
14	Ghana	70.0	65.0	50.0	50.0	<b>235.0</b>
15	Guinea	40.0	20.0	25.0	45.0	<b>130.0</b>
16	Guinea-Bissau	40.0	45.0	10.0	35.0	<b>130.0</b>
17	Haiti	50.0	20.0	20.0	30.0	<b>120.0</b>
18	Kenya	60.0	65.0	40.0	65.0	<b>230.0</b>
19	Lesotho	40.0	25.0	25.0	35.0	<b>125.0</b>
20	Liberia	40.0	45.0	12.0	35.0	<b>132.0</b>
21	Madagascar	90.0	65.0	40.0	65.0	<b>260.0</b>
22	Malawi	40.0	45.0	20.0	30.0	<b>135.0</b>
23	Mali	70.0	65.0	25.0	45.0	<b>205.0</b>
24	Mauritania	30.0	45.0	12.0	35.0	<b>122.0</b>
25	Mozambique	60.0	90.0	50.0	65.0	<b>265.0</b>
26	Niger	70.0	65.0	20.0	45.0	<b>200.0</b>
27	Nigeria	155.0	140.0	100.0	100.0	<b>495.0</b>
28	Papua New Guinea	50.0	65.0	40.0	45.0	<b>200.0</b>
29	Rwanda	50.0	65.0	25.0	45.0	<b>185.0</b>
30	São Tomé and Príncipe	15.0	10.0	6.0	15.0	<b>46.0</b>
31	Senegal	50.0	20.0	25.0	45.0	<b>140.0</b>
32	Sierra Leone	50.0	20.0	25.0	45.0	<b>140.0</b>
33	Somalia	50.0	45.0	25.0	30.0	<b>150.0</b>
34	Sudan	90.0	90.0	40.0	65.0	<b>285.0</b>
35	Tanzania	70.0	65.0	40.0	65.0	<b>240.0</b>
36	Togo	60.0	12.0	12.0	20.0	<b>104.0</b>

No.	COUNTRY	FISCAL ADJUSTMENT	EXPORT DIVERSIFICATION	EMPLOYMENT ADJUSTMENT	SKILLS / PRODUCTIVITY ENHANCEMENT	TOTAL ADJUSTMENT COSTS
37	Uganda	90.0	90.0	50.0	50.0	<b>280.0</b>
38	Zambia	50.0	45.0	25.0	45.0	<b>165.0</b>
39	Zimbabwe	40.0	20.0	25.0	30.0	<b>115.0</b>
40	Angola	40.0	45.0	40.0	45.0	<b>170.0</b>
41	Cape Verde	30.0	30.0	6.0	10.0	<b>76.0</b>
42	Djibouti	15.0	10.0	4.0	30.0	<b>59.0</b>
43	Dominican Republic	50.0	20.0	25.0	20.0	<b>115.0</b>
44	Fiji	20.0	5.0	6.0	15.0	<b>46.0</b>
45	Guyana	15.0	30.0	6.0	10.0	<b>61.0</b>
46	Jamaica	40.0	12.0	12.0	15.0	<b>79.0</b>
47	Kiribati	20.0	10.0	6.0	15.0	<b>51.0</b>
48	Micronesia, Fed. Sts.	20.0	10.0	6.0	15.0	<b>51.0</b>
49	Namibia	40.0	12.0	12.0	15.0	<b>79.0</b>
50	Samoa	20.0	5.0	6.0	10.0	<b>41.0</b>
51	Solomon Islands	20.0	30.0	6.0	15.0	<b>71.0</b>
52	Suriname	20.0	10.0	6.0	15.0	<b>51.0</b>
53	Swaziland	60.0	12.0	25.0	15.0	<b>112.0</b>
54	Tonga	20.0	30.0	4.0	15.0	<b>69.0</b>
55	Vanuatu	20.0	10.0	4.0	30.0	<b>64.0</b>
56	Barbados	20.0	5.0	6.0	10.0	<b>41.0</b>
57	Belize	20.0	10.0	6.0	10.0	<b>46.0</b>
58	Botswana	30.0	12.0	25.0	15.0	<b>82.0</b>
59	Dominica	20.0	5.0	6.0	15.0	<b>46.0</b>
60	Equatorial Guinea	15.0	10.0	15.0	15.0	<b>55.0</b>
61	Gabon	40.0	45.0	25.0	20.0	<b>130.0</b>
62	Grenada	20.0	30.0	6.0	15.0	<b>71.0</b>
63	Mauritius	40.0	12.0	12.0	15.0	<b>79.0</b>
64	Palau	20.0	10.0	4.0	15.0	<b>49.0</b>
65	Seychelles	30.0	30.0	6.0	15.0	<b>81.0</b>
66	South Africa					<b>0.0</b>
67	St. Kitts and Nevis	20.0	5.0	6.0	15.0	<b>46.0</b>
68	St. Lucia	20.0	5.0	4.0	10.0	<b>39.0</b>
69	St. Vincent and the Grenadines	20.0	30.0	6.0	15.0	<b>71.0</b>
70	Trinidad and Tobago	40.0	12.0	25.0	15.0	<b>92.0</b>
71	Bahamas, The	20.0	5.0	6.0	15.0	<b>46.0</b>
<b>TOTAL</b>		<b>3,025.0</b>	<b>2,401.0</b>	<b>1,454.0</b>	<b>2,265.0</b>	<b>9,145.0</b>

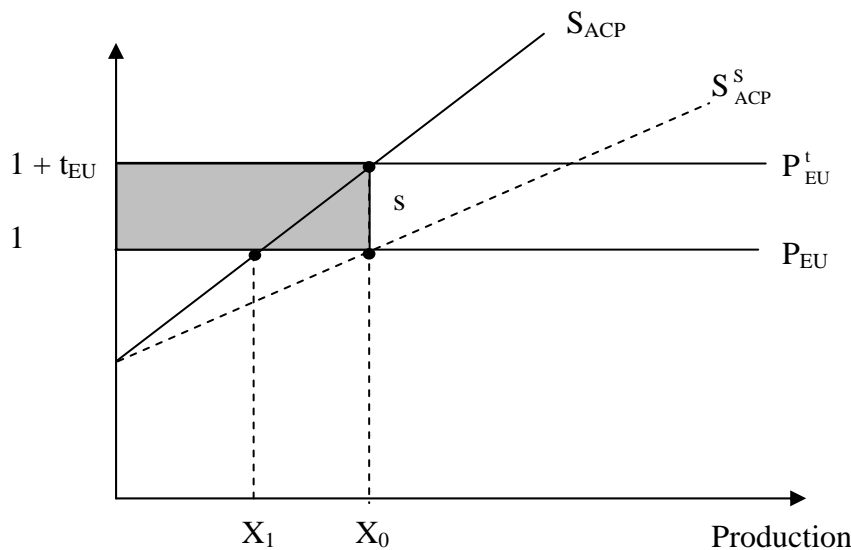
<sup>1</sup> in 2005-equivalent prices. <sup>2</sup> excluded from calculation, given separate FTA arrangement with EU

**APPENDIX 4: ALTERNATIVE ESTIMATE OF COST OF ADJUSTMENT TO EPA (SUBSIDY EQUIVALENT METHODOLOGY)**

Import tariffs on competing imports serve as implicit subsidies to local producers. The creation of an EPA and lowering of import duties on competing imports from the EU would eliminate the implicit subsidy to local producers. Each ACP country could therefore seek financial support/compensation from the EU for the introduction of reciprocity in ACP-EU trade relations in the form of explicit subsidy-equivalents for the eliminated tariffs on imports from the EU for the transitional or adjustment period; these funds being contingent on the adoption of restructuring programmes by sectors.

The conceptualisation and quantification of the ‘subsidy-equivalent’ of the current EU tariff on competing imports is straightforward and directly relates to standard empirical analysis of the effects of an EPA. Consider figure 1 below.

Figure 1: The Subsidy-Equivalent of Current Tariff Protection Against EU Imports



Under pre-EPA conditions and the supply curve ( $S_{ACP}$ ), firms can supply  $X_0$  to the local or regional market by pricing up to the tariff-inclusive price against competing EU imports ( $1 + t_{EU}$ ). The introduction of reciprocity and removal of tariffs on EU imports lowers domestic prices by  $t_{EU}$  and causes domestic producers to reduce production to  $X_1$ . (Estimates of the production effects of the EPA measure the fall in production,  $X_0 - X_1$  fall out of standard partial equilibrium modelling.) The subsidy-equivalent of the tariff ( $t_{EU}$ ) is the subsidy ( $s$ ) that would shift the domestic supply

( $S_{ACP}^s$ ) such that at the tariff-free price from the EU ( $P_{EU}$ ) production can be maintained at the pre-EPA level ( $X_0$ ). The total subsidy-equivalent payment per time period is therefore  $X_0s$  (the shaded area in fig. 1).

CREDIT (2004) report estimates of the (annual) total subsidy-equivalent of the average tariff on imports from the EU for all sectors of the Mauritian economy. The estimated overall cost of an equivalent subsidy is a little over 1.8 billion Rps at 2002 prices. This is equivalent to about 1.2% of Mauritian GDP in 2002.

If one assumes that the subsidy equivalent of the tariff on EU imports on average is the same proportion of GDP across all the ACP countries, one can calculate an aggregate ACP measure of the costs of adjustment (or replacement cost of tariffs vis-à-vis EU imports). In the table below this assumption is applied, after revising 2004 GDP values in euros (using the same inflation adjustment and exchange rate conversion as applied elsewhere in the study). The aggregate estimated replacement cost of tariff on EU imports for all the ACP countries (excluding Somalia for which GDP data was not available) is €6 billion.

No.	Country	GDP (2004) (\$ millions)	EstGDP (2005) <sup>1</sup> (\$ millions)	Subsidy equivalent <sup>2</sup> (\$ millions)	(Euro millions) <sup>3</sup>
<b>Low income</b>					
1	Benin	4,075	4,177	50.1225	41.50143
2	Burkina Faso	4,824	4,945	59.3352	49.12955
3	Burundi	657	673	8.0811	6.691151
4	Cameroon	14,733	15,101	181.2159	150.0468
5	Central African Republic	1,331	1,364	16.3713	13.55544
6	Chad	4,285	4,392	52.7055	43.64015
7	Comoros	367	376	4.5141	3.737675
8	Congo, Dem. Rep.	6,571	6,735	80.8233	66.92169
9	Congo, Rep.	4,384	4,494	53.9232	44.64841
10	Côte d'Ivoire	15,286	15,668	188.0178	155.6787
11	Eritrea	925	948	11.3775	9.42057
12	Ethiopia	8,077	8,279	99.3471	82.2594
13	Gambia, The	415	425	5.1045	4.226526
14	Ghana	8,620	8,836	106.026	87.78953
15	Guinea	3,508	3,596	43.1484	35.72688
16	Guinea-Bissau	280	287	3.444	2.851632
17	Haiti	3,535	3,623	43.4805	36.00185
18	Kenya	15,600	15,990	191.88	158.8766
19	Lesotho	1,375	1,409	16.9125	14.00355
20	Liberia	448	459	5.5104	4.562611

21	Madagascar	4,364	4,473	53.6772	44.44472
22	Malawi	1,813	1,858	22.2999	18.46432
23	Mali	4,863	4,985	59.8149	49.52674
24	Mauritania	1,357	1,391	16.6911	13.82023
25	Mozambique	5,548	5,687	68.2404	56.50305
26	Niger	3,081	3,158	37.8963	31.37814
27	Nigeria	72,106	73,909	886.9038	734.3563
28	Papua New Guinea	3,909	4,007	48.0807	39.81082
29	Rwanda	1,845	1,891	22.6935	18.79022
30	São Tomé and Príncipe	62	64	0.7626	0.631433
31	Senegal	7,665	7,857	94.2795	78.06343
32	Sierra Leone	1,075	1,102	13.2225	10.94823
33	Somalia	...			
34	Sudan	19,559	20,048	240.5757	199.1967
35	Tanzania	10,851	11,122	133.4673	110.5109
36	Togo	2,061	2,113	25.3503	20.99005
37	Uganda	6,833	7,004	84.0459	69.59001
38	Zambia	5,389	5,524	66.2847	54.88373
39	Zimbabwe	17,750	18,194	218.325	180.7731

... = not available

... continued

No.	Country	GDP (2004) (millions)	EstGDP (2005) (\$ millions)	Subsidy equivalent (\$ millions)	(Euro millions)
<b>Lower middle income</b>					
40	Angola	20,108	20,611	247.3284	204.7879
41	Cape Verde	948	972	11.6604	9.654811
42	Djibouti	663	680	8.1549	6.752257
43	Dominican Republic	18,673	19,140	229.6779	190.1733
44	Fiji	2,627	2,693	32.3121	26.75442
45	Guyana	786	806	9.6678	8.004938
46	Jamaica	8,030	8,231	98.769	81.78073
47	Kiribati	62	64	0.7626	0.631433
48	Micronesia, Fed. Sts.	226	232	2.7798	2.301674
49	Namibia	5,456	5,592	67.1088	55.56609
50	Samoa	363	372	4.4649	3.696937
51	Solomon Islands	242	248	2.9766	2.464625
52	Suriname	1,109	1,137	13.6407	11.2945
53	Swaziland	2,413	2,473	29.6799	24.57496
54	Tonga	213	218	2.6199	2.169277
55	Vanuatu	316	324	3.8868	3.21827
<b>Upper middle income</b>					
56	Barbados	2,627	2,693	32.3121	26.75442
57	Belize	1,094	1,121	13.4562	11.14173
58	Botswana	8,659	8,875	106.5057	88.18672
59	Dominica	269	276	3.3087	2.739604
60	Equatorial Guinea	3,235	3,316	39.7905	32.94653
61	Gabon	7,228	7,409	88.9044	73.61284
62	Grenada	436	447	5.3628	4.440398

63	Mauritius	6,056	6,207	74.4888	61.67673
64	Palau	127	130	1.5621	1.293419
65	Seychelles	704	722	8.6592	7.169818
66	South Africa	212,777	218,096	2617.157	2167.006
67	St. Kitts and Nevis	397	407	4.8831	4.043207
68	St. Lucia	729	747	8.9667	7.424428
69	St. Vincent and the Grenadines	403	413	4.9569	4.104313
70	Trinidad and Tobago	12,544	12,858	154.2912	127.7531
<b>High income: non-OECD</b>					
71	Bahamas, The	5,260	5,392	64.698	53.56994
<b>Total</b>					<b>5998.072</b>

<sup>1</sup> GDP (2004) \* 1.025 (ie assumed 2.5% inflation rate).

<sup>2</sup> Est GDP (2005) \* 0.012 (ie assumed rate of GDP of 1.2% as in case of CREDIT (2004) study of subsidy equivalent of Mauritius tariff on EU imports.

<sup>3</sup> US \$ values expressed in € at rate 1\$ = 0.828€

